

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
COUNTY OF LOS ANGELES, CALIFORNIA	)	File Nos. 0002981309, 0002981681,
	)	0002981683, 0002981684, 0002981686,
Request For Waiver of the Commission's Rules to	)	0002981689, 0002981694, 0002981696,
Authorize Public Safety Communications in the	)	0002981697, 0002981699, 0002981702,
476-482 MHz Band	)	0002981703, 0002981706, 0002981710,
	)	0002981716, 0002983904, 0002983906,
	)	0002983909, 0002983910, 0002983913,
	)	0002983917, 0002983924, 0002983926,
	)	0002983929, 0002983932, 0002983935,
	)	0002983938, 0002983941, 0002983944,
	)	0002985272, 0002985273, 0002985274,
	)	0002985275, 0002985276, 0002985277,
	)	0002985278, 0002985279, 0002985280,
	)	0002985281, 0002985282, 0002985283,
	)	0002985284, 0002985285, 0002985286,
	)	0002985287, 0002985288, 0002985289,
	)	0002985291, 0002987900, 0002987901,
	)	0002987903, 0002987907, 0002987909,
	)	0002987911, 0002987913, 0002987914,
	)	0002987915

ORDER

Adopted: December 30, 2008**Released: December 30, 2008**

By the Chief, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. The County of Los Angeles, California (the County) filed fifty-seven applications and request for waiver¹ to use, for public safety communications, all frequencies in the television (TV) Channel 15 band (476-482 MHz). For the reasons stated below, we conditionally grant the County's request and will process its applications accordingly. We take this action in furtherance of our ongoing

¹ See File Nos. 0002981309, 0002981681, 0002981683, 0002981684, 0002981686, 0002981689, 0002981694, 0002981696, 0002981697, 0002981699, 0002981702, 0002981703, 0002981706, 0002981710, 0002981716 (filed Apr. 5, 2007, amended Jan. 2, 2008); File Nos. 0002983904, 0002983906 (filed Apr. 6, 2007, amended Jan. 2, 2008); File Nos. 0002983909, 0002983910, 0002983913, 0002983917, 0002983924, 0002983926, 0002983929, 0002983932, 0002983935, 0002983938, 0002983941, 0002983944 (filed Apr. 6, 2007, amended Nov. 7, 2007); File Nos. 0002985272, 0002985273, 0002985274, 0002985275, 0002985276, 0002985277, 0002985278, 0002985279 (filed Apr. 9, 2007, amended Nov. 7, 2007); File Nos. 0002985280, 0002985281, 0002985282, 0002985283, 0002985284, 0002985285, 0002985286, 0002985287, 0002985288, 0002985289, 0002985291, 0002987900, 0002987901, 0002987903, 0002987907, 0002987909, 0002987911, 0002987913, 0002987914, 0002987915 (filed Apr. 9, 2007, amended Nov. 6, 2007) and attached Request for Waiver dated Feb. 21, 2007 (Waiver Request).

efforts to facilitate effective public safety communications and to promote interoperability between public safety agencies.

II. BACKGROUND

2. The County states that it “covers an area of 4,084 square miles of extremely varied terrain, and is home to ten million persons, making it the most populous county in the nation.”² The County “is home to the two busiest ports in the nation (Los Angeles and Long Beach), the fifth busiest airport in the world (LAX), sensitive military and industrial facilities, and other high profile targets throughout the area.”³ The County states that “the region is prone to natural disasters, such as forest wildfires, floods, mud-slides, earthquakes, high winds, high waves and tornados.”⁴ The County asserts that these factors, coupled with “heightened security concerns” since 2001 “have placed tremendous strain on existing public safety communication networks.”⁵ The County states that “[t]he current public safety radio systems serving [the] Los Angeles area are inadequate to meet the growing demands on first responders and other public safety agencies in the region.”⁶ The County further contends that “[t]he systems are over-crowded, and lack the ability to provide area-wide interoperability between public safety agencies and jurisdictions.”⁷

3. The County is planning “a standards-based, single-platform, UHF⁸ voice radio system that it anticipates will be used by all public safety agencies in the County.”⁹ Further, it “will replace the existing disparate systems and provide seamless coverage across the 4,200 square miles of the County.”¹⁰ The County observes that frequencies in the TV Channel 15 band “are immediately adjacent to channels 14 and 16, that are already allocated for land mobile operations in Los Angeles and currently provide the principal radio communications for the County and other public safety agencies within its borders.”¹¹ Thus, the County concludes that TV Channel 15 spectrum “is ideal to enhance communications in the densely populated Los Angeles area in a manner that promotes greater interoperability among the multitude of public safety agencies serving the region.”¹² The County notes that “Channel 15 is not currently assigned for television service in the immediate Los Angeles area, primarily due to the existing

² Waiver Request at 1.

³ *Id.* at 2.

⁴ *Id.* citing Amendment of Parts 2, 73, and 90 of the Commission’s Rules and Regulations to Allocate Additional Channels in the Band 470-512 MHz for Public Safety and Other Land Mobile Services, Gen. Docket No. 84-902, RM-3975, *Report and Order*, 59 Rad. Reg. 2d (P&F) 910 (1986).

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ Frequencies in the 300 MHz to 3 GHz range are Ultra High Frequencies (UHF), but land mobile frequencies in the 450-512 MHz range are sometimes known as the land mobile “UHF band.” In this *Order*, references to UHF mean 450-512 MHz. See, e.g., Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Notice of Proposed Rule Making*, WT Docket No. 99-87, 14 FCC Rcd 5206, 5215 ¶¶ 11-12 (1999).

⁹ Waiver Request at 2.

¹⁰ *Id.* at 2-3.

¹¹ *Id.* at 3.

¹² *Id.*

adjacent-channel public safety and other land mobile allocations that a television station on channel 15 would be required to protect from interference.”¹³ The County contends that its proposed use of the subject frequencies is necessary because “[t]he Commission has repeatedly recognized that there are currently no frequencies available in any public safety band in the Los Angeles area.”¹⁴ In support of its request for frequencies in the TV Channel 15 band, the County submitted an engineering study to demonstrate that its land mobile operations would not interfere with the reception of any full power TV stations.¹⁵ The County states that it seeks to remain in the 470-512 MHz band (also known as the “T-Band”) “to preserve critical interoperability” with its TV Channel 14, 16, and 20 infrastructure, and “to avoid the crippling cost of rebuilding” radio systems in another band.¹⁶ The County asserts that in any event, “there will not be sufficient capacity in the 700 MHz narrowband channels to accommodate all of the public safety users in the County that will operate at 470-512 MHz.”¹⁷ The County states that “there is no mobile/portable equipment available today . . . that would span both the 470-512 and 700 MHz bands.”¹⁸

4. Initially, the County sought waiver of Sections 90.303 and 90.305, and Part 73 of the Commissions rules,¹⁹ pursuant to Section 1.925,²⁰ to use all frequencies in the TV Channel 15 band for public safety communications. Because these frequencies are not allocated for public safety operations, the County subsequently filed a supplement²¹ containing a request for waiver pursuant to Section 337(c) of the Communications Act of 1934 (the Act), as amended,²² and an engineering supplement to quantify the County’s spectrum needs.²³

5. On January 17, 2008, the Public Safety and Homeland Security Bureau (Bureau) placed the waiver request and associated applications on public notice.²⁴ The Bureau invited comment on whether the 700 MHz public safety band would provide a viable alternative, particularly in light of the

¹³ *Id.*

¹⁴ *Id.* at 5, citing South Bay Regional Public Safety Communications Authority, *Memorandum Opinion and Order*, 13 FCC Rcd 23781 (WTB 1998); City of Pomona, *Order*, 15 FCC Rcd 15597 (WTB 2000); City of Santa Monica, *Order*, 15 FCC Rcd 24938 (WTB 2000); City of Burbank, *Memorandum Opinion and Order*, 18 FCC Rcd 23770 (WTB PSPWD 2003). See also *supra* note 1, attached Supplement to Request for Waiver, dated October 17, 2007 (Waiver Supplement) at 3.

¹⁵ See *supra* note 1, attached Engineering Study: Impacts to Television From Los Angeles County Public Safety Radio Communications Operations on Channel 15, dated Dec. 2006 (TV Study).

¹⁶ Waiver Request at 6.

¹⁷ Waiver Supplement at 4-5.

¹⁸ *Id.* at 4.

¹⁹ 47 C.F.R. §§ 90.303 and 90.305, Part 73.

²⁰ 47 C.F.R. § 1.925.

²¹ See Waiver Supplement.

²² 47 U.S.C. § 337(c).

²³ See *supra* note 1, attached Engineering Study: Capacity Requirements for a County-Wide Interoperable Public Safety Radiocommunications System for Los Angeles County, dated Oct. 2007 (Capacity Study).

²⁴ See Public Safety and Homeland Security Bureau Seeks Comment on a Request for Waiver Filed by the County of Los Angeles, California to Operate a Public Safety Radio System Utilizing Television Channel 15 Spectrum, *Public Notice*, 23 FCC Rcd 443 (PSHSB 2008) (*Public Notice*).

approaching February 17, 2009 digital television transition date, and the Commission's recent actions in facilitating a nationwide, interoperable public safety network.²⁵ The Bureau also invited comment and analysis on the impact of the County's waiver request on low power TV, TV translator and Class A TV stations located outside of the 130-kilometer area around Los Angeles.²⁶ The Bureau noted that such stations may not operate within 130 kilometers of Los Angeles because of the land mobile service allocation on TV Channels 14, 16 and 20 according to Sections 73.6020 and 74.709.²⁷ However, the Bureau sought comment on the potential impact of the waiver request on the ability of LPTV, TV translator and Class A TV stations to convert existing analog operations on TV Channels 14, 15 or 16 to digital operations.²⁸ The list of parties who filed comments and reply comments appears in Appendix A.

6. *Comments.* Entravision Holdings, LLC (Entravision) contested the waiver request before it was placed on public notice.²⁹ Entravision also joins San Diego State University (SDSU) in filing comments stating that the applications and Waiver Request are "contrary to the public interest" and should be dismissed or denied.³⁰ They and KJLA, LLC (KJLA) state that grant of the waiver would disrupt the Commission's careful balancing of policy concerns to the detriment of broadcast television because the Commission has already allocated the 700 MHz band for public safety.³¹ In light of the 700 MHz proceedings, Entravision and KJLA note that the public safety community will gain spectrum, while TV broadcasters, especially LPTV and Class A operators, will be constrained as they relinquish all channels above TV Channel 51.³² Entravision states that "[t]he pool of broadcast spectrum is further diminished by the requirement to protect neighboring analog and DTV allotments in Mexico."³³ Therefore, Entravision and Shure, Inc. (Shure) argue that 700 MHz spectrum has been made available for the exclusive use of public safety agencies and must be taken into consideration.³⁴ "Given that the County will need to operate on both its currently allotted spectrum and the 700 MHz band in the long-term," SDSU asserts that the County's "current cost and convenience arguments for why it must be allowed to operate on adjacent spectrum in channel 15 are unavailing."³⁵

²⁵ *Id.*, 23 FCC Rcd at 444-5. See Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229; Development of Operational, Technical and Spectrum Requirements for Meeting Federal State and Local Public Safety Communications Requirements through the Year 2010, WT Docket No. 96-86, *Second Report and Order*, 22 FCC Rcd 15289 (2007).

²⁶ *Public Notice*, 23 FCC Rcd at 445.

²⁷ *Id.* See 47 C.F.R. §§ 73.6020, 74.709.

²⁸ *Public Notice*, 23 FCC Rcd at 445.

²⁹ See Consolidated Informal Objection filed by Entravision Holdings, LLC (Entravision) on August 14, 2007 (Entravision Initial Objection). See also Consolidated Informal Objection filed by Entravision Holdings, LLC on October 29, 2007.

³⁰ Entravision Comments at 2; San Diego State University (SDSU) Comments at 1.

³¹ See Entravision Initial Objection at 3; Entravision Comments at 2; KJLA, LLC (KJLA) Comments at 2; SDSU Comments at 2.

³² See KJLA Comments at 2; Entravision Comments at 2.

³³ Entravision Comments at 2-3.

³⁴ See Entravision Comments at 3; Shure, Inc. (Shure) Comments at 4.

³⁵ SDSU Comments at 6-7.

7. Entravision and SDSU submit that the County's TV Channel 15 proposal would cause interference to Entravision's proposed digital LPTV Channel 14 operation, impede SDSU's transition to a digital TV translator on TV Channel 15, and impede efforts for other broadcasters in southern California to transition to DTV.³⁶ Specifically, they argue that grant of the request would unduly limit channel availability for digital Class A, LPTV, and TV translator operations, and would exacerbate the problem of scarce spectrum in Southern California.³⁷ SDSU states that the County's proposed operation would violate Sections 90.303 and 90.305³⁸ because the County would use a TV channel not allocated to land mobile systems in Los Angeles, and some sites would be located more than 80 kilometers from the city center.³⁹ SDSU cites *Goosetown*, a Commission decision where it required that an applicant seeking a waiver to operate outside the geographic limits set in Section 90.305 must demonstrate that it would provide full protection to pending applications.⁴⁰ SDSU states that the County's claim that LPTV and TV translators are secondary to LA County's proposed operations "is clearly refuted by the Commission in the *Goosetown* case."⁴¹

8. KJLA and Shure urge the Commission to consider that certain TV channels, including TV Channel 15, may be used by low power auxiliary stations (e.g., wireless microphones).⁴² Shure states that "[w]ireless microphones are essential to the production of content for virtually all media outlets."⁴³ KJLA and Shure note that Los Angeles' large concentration of major entertainment productions relies on these devices being free of interference.⁴⁴ Because the County's proposed use has the potential to interfere with these devices, and vice versa, they urge the Commission to consider the harmful results on the entertainment industry and various components of the Southern California economy.⁴⁵ Shure states that "[t]he operation of a public safety radio system on Channel 15 would significantly reduce the amount

³⁶ See Entravision Comments at 2; SDSU Comments at 1-2. Entravision's Channel 14 digital LPTV application file number is BDCCDTL-20070411AAR. SDSU's Channel 15 digital TV translator application file number is BSFDTT-20070417AAM. We note that both applications were dismissed on May 15, 2008. See Letter from Hossein Hashemzadeh, Associate Chief, Video Division, Media Bureau, Federal Communications Commission, to Entravision Holdings, LLC (dated May 15, 2008) (Entravision Dismissal Letter); Letter from Hossein Hashemzadeh, Associate Chief, Video Division, Media Bureau, Federal Communications Commission, to Board of Trustees, C.S.U. for San Diego State University (dated May 15, 2008) (SDSU Dismissal Letter). Both applicants have filed petitions for reconsideration of their respective dismissal letters. See Entravision Holdings, LLC, Petition for Reconsideration (filed June 13, 2008); Board of Trustees, San Diego State University, Petition for Reconsideration (filed June 10, 2008).

³⁷ See Entravision Comments at 3; SDSU Comments at 5.

³⁸ 47 C.F.R. §§ 90.303, 90.305.

³⁹ See SDSU Comments at 3.

⁴⁰ See *id.* citing *Goosetown Enterprises, Memorandum Opinion and Order*, 6 FCC Rcd at 12792, 12797 ¶ 13 (2001) (*Goosetown*).

⁴¹ SDSU Comments at 4, citing LA County waiver request at 7.

⁴² See KJLA Comments at 2-3; Shure Comments at 2. See 47 C.F.R. Part 74 Subpart H.

⁴³ Shure Comments at 2.

⁴⁴ See KJLA Comments at 3; Shure Comments at 2.

⁴⁵ KJLA Comments at 3; Shure Comments at 2-3.

of TV band spectrum available ... for operation of wireless microphones and other types of professional wireless production equipment.”⁴⁶

9. A significant majority of commenters support a grant of the County’s Waiver Request.⁴⁷ Officials from the City of Los Angeles assert that public safety agencies in the region need immediate additional radio frequency capacity “due to the public’s additional demand for service and an ever-increasing need for mutual aid response to catastrophic disasters.”⁴⁸ Several local public safety agencies state that current networks lack the capacity to integrate all of the diverse agencies in the County on a single radio platform, but using the additional spectrum at TV Channel 15 will allow for the rapid implementation and deployment of a county-wide interoperable radio network.⁴⁹ With a significant portion of the County and local agencies on some type of UHF system, several commenters state that a UHF single platform network makes sense from a cost and operations standpoint.⁵⁰

10. The supporting commenters also come to a consensus that the 700 MHz band would not meet the County’s current needs. First, several commenters assert that the 700 MHz band has insufficient narrowband capacity for all of the County’s agencies in the context of providing a single platform.⁵¹ Second, several commenters assert that moving to the 700 MHz band from UHF would be cost prohibitive, and agencies operating on UHF frequencies cannot afford to abandon their equipment for a move to the 700 MHz band.⁵² Finally, equipment manufacturer Motorola, Inc. (Motorola) echoes the County’s observation that “radio equipment for the 700 MHz band is not interoperable with UHF

⁴⁶ *Id.*

⁴⁷ One commenter, Enterprise Wireless Alliance (EWA), takes no position on the sufficiency of the waiver request itself, but rather urges the Commission to grant the Los Angeles County Sheriff’s Department’s objection to Entravision’s pending application for a TV Channel 14 LPTV station on the basis that it will cause intolerable interference to PLMRS licensees in the Los Angeles area. *See* EWA Comments at 1-2. EWA’s request is outside the scope of this proceeding, and thus, we decline to take any action related to EWA’s request herein. Another commenter supports the waiver request, but raises an ancillary issue, which we address *infra*. *See* South Bay Regional Public Communications Authority Comments (South Bay) Comments.

⁴⁸ Los Angeles City Councilmember and Chair of the Public Safety Committee Jack Weiss (Jack Weiss) Comments at 2; Los Angeles Mayor Antonio Villaraigosa (Mayor Villaraigosa) Comments at 2; Los Angeles Area Fire Chiefs Association (LAAFCA) Comments at 2.

⁴⁹ *See* Downey, California Police Department (Downey PD) Comments at 1-2; El Monte, California Police Department (El Monte PD) Comments at 1-2; Vernon, California Police Department (Vernon PD) Comments at 2-3; Glendale, California Police Department (Glendale PD) Comments at 2; Jack Weiss Comments at 3; Mayor Villaraigosa Comments at 2; Raytheon Company (Raytheon) Comments at 2; Azusa, California Police Department (Azusa PD) Comments at 1-2.

⁵⁰ *See* Claremont, California Police Department (Claremont PD) Comments at 2; El Monte PD Comments at 2; Raytheon Comments at 2; Azusa PD Comments at 2; Motorola, Inc. (Motorola) Comments at 3.

⁵¹ *See* Claremont PD Comments at 2; Downey PD Comments at 2; Vernon PD Comments at 3; Glendale PD Comments at 2-3; Jack Weiss Comments at 3; Mayor Villaraigosa Comments at 2; LAAFCA Comments at 2; National Public Safety Telecommunications Council (NPSTC) Comments at 6.

⁵² *See* Claremont PD Comments at 2; El Monte PD Comments at 2; Vernon PD Comments at 3; Glendale PD Comments at 2; Azusa PD Comments at 2; Motorola Comments at 3.

equipment that is used by public safety agencies in the County.”⁵³ Motorola states that “there is no equipment currently available that covers both the 700 MHz band and the UHF band.”⁵⁴

11. The National Public Safety Telecommunications Council (NPSTC) adds that “[t]he Commission’s work under [S]ection 337(c) [of the Act] is a tangible demonstration of how its commitment and decisions have resulted in enhancing public safety communications and promoting interoperability.”⁵⁵ NPSTC argues that “Los Angeles and other applicants must be able to continue to pursue channels in the non-public safety bands prior to and subsequent to the analog broadcast transition in February 2009.”⁵⁶ NPSTC asserts that “[c]ontrary to the contention of the broadcast interest, channel 15 in the LA area is unassigned and meets the standard of [S]ection 337(c) [of the Act] to be available.”⁵⁷ NPSTC continues, “[t]here is no information in any application by a broadcast interest to use the channel.”⁵⁸ Further, “[t]he proper balance of the public interest must weigh on the side of improving emergency service communication over fulfilling the objectives of Class A and LPTV broadcasters.”⁵⁹ According to NPSTC, the County “shows enormous investment commitment by local governments in the UHF band and why its proposal to use channel 15 and integrate it with these systems is an efficient and effective extension.”⁶⁰

12. *Reply Comments.* Two parties filed opposing reply comments. Entravision argues that the County “has not presented the requisite evidence that existing spectrum and spectrum being made available as a result of the digital transition will not meet its needs.”⁶¹ Entravision asserts that “Congress did not intend for the County to secure Channel 15.”⁶² Entravision argues that “the taking of Channel 15 for public safety purposes, with 24 megahertz of the 700 MHz just becoming available to public safety, is not in the public interest.”⁶³ The Broadway League supports Shure’s comments and reiterates the concerns about interference with wireless microphones.⁶⁴ The Broadway League states that granting the application “without assessment of its impact on current users may result in widespread interference with other devices operating on channel 15, devastating wireless microphone equipment and disrupting transmissions in a broad range of uses.”⁶⁵

⁵³ Motorola Comments at 3 *citing* Waiver Request at 6.

⁵⁴ Motorola Comments at 3.

⁵⁵ NPSTC Comments at 4.

⁵⁶ *Id.* at 5.

⁵⁷ *Id.* at 7. *See also* SDSU Comments at 7.

⁵⁸ NPSTC Comments at 7.

⁵⁹ *Id.* at 7.

⁶⁰ *Id.* at 8.

⁶¹ Entravision Reply Comments at 2.

⁶² *Id.* at 3 *citing* Conference Report to Accompany H.R. 215, Balanced Budget Act of 1997, 106th Cong., 1st Sess., Report 105-217 (July 30, 1997) at 176, 200 (Conference Report).

⁶³ Entravision Reply Comments at 3.

⁶⁴ *See* Broadway League [Reply] Comments at 2.

⁶⁵ *Id.*

13. Two parties filed supporting reply comments. Metropolitan Water District of Southern California (MWD) agrees with NPSTC that “the 700 MHz band is not a viable option to meet the communications demands of Los Angeles County.”⁶⁶ MWD states that “given the volume of public safety users in Southern California, it is clear that both before and after 700 MHz is deployed, the UHF spectrum will be needed to accommodate all of the public safety needs of this region.”⁶⁷ Finally, MWD warns that “[i]f the Commission does not allow the continued licensing of vacant UHF (and VHF) spectrum under Section 337(c) of the Act, then the Commission will be taking a giant step back from [the Commission’s] goal of ensuring interoperable communications systems between different public safety systems.”⁶⁸ The County states the legislative history of Section 337(c) of the Act makes it clear that Congress recognized that “in heavily congested markets, sufficient spectrum may not be available between 746 and 806 MHz for public safety services,”⁶⁹ and therefore, the Commission “should be required to waive its rules to permit public safety use of non-public safety spectrum in other bands.”⁷⁰ The County concurs with many supporting commenters’ observations that “the FCC’s recent initiative to promote a national public safety broadband network in the 700 MHz band will not address the County’s requirements for mission-critical voice communications.”⁷¹ The County reiterates that “digital LPTV and TV translator stations will have a secondary status that will require the correction of interference to a primary service.”⁷² The County asserts that the broadcasters’ reliance on *Goosetown* is misplaced because “Congress made it clear in adopting Section 337(c) that the FCC ‘shall waive’ its rules under certain conditions to allow for public safety use of unassigned non-public safety spectrum.”⁷³ Further, the County argues that “Congress clearly intended for [the second criterion of Section 337(c) of the Act] to provide protection only to already licensed operations, not to mere applicants for future service.”⁷⁴ The County states that wireless microphone use is “clearly secondary under the FCC’s rules, and not entitled to interference protection.”⁷⁵

14. On July 8, 2008, the County filed a Further Supplement to Request for Waiver indicating that “the County now commits that it will not initiate operations on 476-482 MHz until after February 17, 2009, the statutory deadline for the DTV transition.”⁷⁶

⁶⁶ Metropolitan Water District of Southern California Reply Comments at 1.

⁶⁷ *Id.* at 5.

⁶⁸ *Id.* at 6.

⁶⁹ LA County Reply Comments at 2-3, *citing* Conference Report at 579.

⁷⁰ LA County Reply Comments at 3.

⁷¹ *Id.* at 3.

⁷² *Id.* at 4-5 quoting Amendment of Parts 73 and 74 of the Commission’s Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations, *Report and Order*, 19 FCC Rcd 19331, 19372 (2004) (*Digital LPTV R&O*).

⁷³ LA County Reply Comments at 4 *citing* 47 U.S.C. § 337(c)(1).

⁷⁴ LA County Reply Comments at 4-5 *citing* Conference Report at 580.

⁷⁵ LA County Reply Comments at 6.

⁷⁶ Further Supplement to Request for Waiver, dated July 8, 2008 (Further Supplement) at 1.

III. DISCUSSION

15. Section 337(c) of the Act provides that, in connection with an application by an “entity seeking to provide public safety service,” the Commission “shall waive any requirement of this Act or its regulations implementing this Act (other than its regulations regarding harmful interference) to the extent necessary to permit the use of unassigned frequencies for the provision of public safety services . . .” if the Commission finds that:

- no other spectrum allocated to public safety services is immediately available to satisfy the requested public safety service use;
- the requested use is technically feasible without causing harmful interference to other spectrum users entitled to protection from such interference under the Commission’s regulations;
- the use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made;
- the unassigned frequency was allocated for its present use not less than 2 years prior to the date on which the application is granted; and
- granting such application is consistent with the public interest.⁷⁷

16. When considering waiver requests filed pursuant to Section 337(c) of the Act, we first determine whether the applicant is an “entity seeking to provide public safety services.”⁷⁸ The Act defines public safety services as “services – (A) the sole or principal purpose of which is to protect the safety of life, health, or property; (B) that are provided – (i) by State or local government entities; or (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and (C) that are not made commercially available to the public by the provider.”⁷⁹ The County “is a government entity requesting frequencies for official activities, the principal purpose of which is the protection of life, health, and property.”⁸⁰ Based on the information before us, including that the County does not make services commercially available to the public, the County is an entity that provides public safety services. Next, we consider whether the County’s petition satisfies the specific showing requirements mandated by Section 337(c) of the Act.

17. *No other spectrum allocated to public safety services is immediately available to satisfy the requested public safety service use.* As discussed herein, we find that no other spectrum allocated to public safety services is immediately available to satisfy the requested need. While we consider the 700 MHz public safety band to be immediately available given the approaching February 2009 DTV transition date, we find that the quantity of 700 MHz spectrum is not enough to satisfy the requested need in this case, and that the requested need is reasonable because at the time the County planned its radio system the 700 MHz spectrum was not available. In the context of Section 337 waiver requests, the mere “availability” of spectrum in an alternate public safety band does not necessarily end our inquiry or render

⁷⁷ 47 U.S.C. § 337(c).

⁷⁸ See 47 U.S.C. § 337(f).

⁷⁹ *Id.*

⁸⁰ Supplement at 2.

Section 337 unavailable to a waiver proponent. Rather, by the terms of the statute, such spectrum must be “*immediately* available to satisfy the *requested public safety service use*.”⁸¹ This is a fact specific inquiry that requires that we take into account not only the presence of alternative public safety allocations, but the specific needs of the requesting agency and any factual circumstances that necessitate access to a non-public safety band.

18. First, we examine the availability of public safety frequencies outside the 700 MHz band. As we noted above, the County states that “[t]he Commission has repeatedly recognized that there are currently no frequencies available in any public safety band in the Los Angeles area.”⁸² In support of its assertion, the County provided a letter from the Association of Public-Safety Communications Officials-International, Inc. certifying that it “cannot find any portion of UHF band channels or any other frequency band within the Public safety pool that is now available to meet your agency’s requirements in the Los Angeles basin.”⁸³ The County also provided a letter from the 800 MHz Regional Public Safety Planning Committee for Region 5 certifying that “all frequencies for the region have been assigned,” and “[t]here is little spectrum resources available for any significant system expansion.”⁸⁴ We agree that there is not enough unassigned spectrum available in these public safety bands to satisfy the County’s proposed use.

19. With respect to the 700 MHz band, we disagree with NPTSC’s assertion that the 700 MHz band be considered as an element in the waiver process only after the DTV transition date of February 17, 2009.⁸⁵ Rather, we find it is reasonable to consider the 700 MHz band to be immediately available for purposes of Section 337 in light of the approaching February 17, 2009 DTV transition date. We therefore expect that public safety entities will consider this band when designing their overall approaches to spectrum use, resolving multi-jurisdictional interoperability issues, and expanding the reach of current VHF, UHF and 800 MHz systems.⁸⁶

20. Yet in this case, we find that the 700 MHz band does not provide sufficient spectrum to meet the County’s needs. The County states that “[t]he 700 MHz channel allocations have already been assigned within the Region 5 Plan, where two-hundred-and-twenty (220), 6.25 kHz pairs were assigned for possible use within the County.”⁸⁷ This equates to 2.75 megahertz of spectrum. The County states

⁸¹ 47 U.S.C. § 337(c)(1)(A) (emphasis added). See *MO&O*, 17 FCC Rcd. 7553, para. 54 (2002) (“effect must be given, if possible, to every word, clause and sentence of the statute”).

⁸² See *supra* note 14.

⁸³ Letter from Gary David Gray, P.E., CPRA/APCO Local Frequency Coordination Advisor for Southern California, to Captain Richard A. Adams, Communications and Fleet Management Bureau, Los Angeles County Sheriff’s Department (dated Feb. 8, 2007).

⁸⁴ Letter from Ron Wong, Chairperson, Region 5, 800 MHz Regional Public Safety Planning Committee for Region 5, to Mr. Robert M. Gurss, Fletcher, Heath & Hildreth, PLC (dated Oct. 10, 2007).

⁸⁵ NPSTC Comments at 8.

⁸⁶ See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 99-87, 15 FCC Rcd. 22709, 22769 ¶ 132 (2000) (“[W]e believe that the statute requires that there be no unassigned public safety spectrum, or not enough for the proposed public safety use, in any band in the geographic area in which the Section 337 applicant seeks to provide public safety services.”).

⁸⁷ Capacity Study at 5. On June 6, 2008, the Bureau approved an amended 700 MHz plan submitted by the Region 5 (Southern California) Regional Planning Committee (RPC). See Public Safety and Homeland Security Bureau Approves Region 5 (Southern California) 700 MHz Regional Plan Amendment, PS Docket No. 06-229, WT Docket No. 02-378, *Public Notice*, 23 FCC Rcd 8759 (PSHSB 2008).

that “[t]hese channels are all not available in the County however, as they must also be shared and coordinated with San Bernardino, San Diego, Orange, and Riverside Counties.”⁸⁸ We note that the State of California has withdrawn its request for 120 General Use channel pairs, or 1.5 megahertz of the spectrum administered by the Region 5 RPC.⁸⁹ The Region 5 RPC has yet to file a revised plan that would allocate this portion on the local level.⁹⁰ If the County were to have full access to this additional 1.5 megahertz portion of the General Use spectrum, the total 700 MHz spectrum available to the County would rise to 4.25 megahertz. The County determined that its capacity needs range between 1,140 and 1,980 frequency pairs at 6.25 kHz bandwidth, depending on the capacity model used.⁹¹ Based on these numbers, the County calculates a total spectrum demand of between 14.25 to 24.75 megahertz.⁹² For a single platform solution at 700 MHz (*i.e.*, with all operations relocated to that band), 4.25 megahertz would not support the total spectrum demand of at least 14.25 megahertz.⁹³ Furthermore, we note that the County did not indicate whether it considered seeking access to the 700 MHz State License spectrum for California, Station WPTZ774.⁹⁴ Even assuming that the County was able to secure access to the entire State License (2.4 megahertz), the total would be 6.65 megahertz and still insufficient to support the total spectrum demand. Therefore, we conclude that the 700 MHz band would not afford enough spectrum for the proposed single platform public safety service use.

21. In contrast, the County observes that, in terms of its desired single platform solution, 10.67 megahertz of spectrum in the UHF band at TV Channels 14, 16, and 20 is already utilized by public safety operations in the County.⁹⁵ An additional six megahertz from TV Channel 15 would thus result in a total single UHF platform-based capacity of 16.67 megahertz. Accordingly, the addition of TV Channel 15 would accommodate the lower estimate of the County’s total spectrum demand (14.25 megahertz). If it turns out that the County’s total spectrum demand should require more than 16.67 megahertz, then the

⁸⁸ Capacity Study at 5.

⁸⁹ See Modification to Region 5, 700 MHz Plan, Docket Number 02-378, attached Letter from Gary R. Grootveld, Chief, Office of Public Safety Communications Services, State of California Department of General Services, Telecommunications Division, to Mr. David Buchanan, Chair, Regional Planning Committee, Region 5 – 700 MHz (dated Jan. 14, 2008) (Grootveld Letter).

⁹⁰ Because “the [Grootveld Letter] was received after the Regional Committee meeting on January 16, 2008 and after adjacent region concurrence was received,” Region 5 states that it “intends to make other plan revisions at a later date ...” See Modification to Region 5, 700 MHz Plan, Docket Number 02-378, attached Letter from David Buchanan, Chair, Region 5 700 MHz Regional Planning Committee, to Marlene H. Dortch, Secretary, Federal Communications Commission (dated Jan. 29, 2008).

⁹¹ See Capacity Study at 17. The smaller figure was calculated with the Commission’s channel loading criterion, 47 C.F.R. § 90.313, while the larger figure was calculated using Erlang Analysis. *Id.* Under Erlang/Traffic analysis, system performance is evaluated based upon its ability to serve its users under an offered traffic load - which its components (typically multi-channel trunked radio sites) need to handle. *Id.* at 8.

⁹² See *id.* at 12, 16.

⁹³ See Waiver Supplement at 5.

⁹⁴ The Commission has designated 2.4 megahertz of spectrum for State Licenses. See 47 C.F.R. § 90.529.

⁹⁵ See Capacity Study at 4, 12, 16. The County states that the UHF channels “are nearly all utilized for public safety operations on 12.5 kHz channel bandwidths. *Id.* at 4. Although TV Channels 14, 16, and 20 contain nearly eighteen megahertz of spectrum allocated for PLMR use, public safety entities do not have access to the full amount because they share the T-band spectrum with other categories of users such as “Business.” See 47 C.F.R. § 90.311(a)(1). The amount of spectrum allotted to a particular category differs in each urbanized area due to the “first-come, first-serve” licensing system unique to the T-Band. See 47 C.F.R. § 90.311(a)(2).

County would still face a shortfall in spectrum capacity, thus potentially requiring the County to reevaluate its plans for a single platform solution. We find, however, that it is quite likely that granting the County's waiver request will allow the County to provide for a viable single platform solution, and that the County will be able to use these frequencies to provide public safety services, consistent with Section 337(c) of the Act. If the County ultimately is not able to deploy a single platform solution because of a shortfall in spectrum capacity, we will reconsider our decision to permit the County to use the TV Channel 15 spectrum.

22. Finally, we find that the County did not act unreasonably when it planned for a single platform solution. As noted above, the County first submitted its applications in April 2007, almost two years before the DTV transition date. Thus, in the time prior to its April 2007 filing date, when the County initiated its large-scale planning and determined its spectrum use requirements, specifically its single platform solution, the availability of the 700 MHz band was reasonably too distant in the future to factor into its planning. At the same time, TV Channels 14, 16, and 20 were already in use for the County's "principal radio communications," and the County concluded that the addition of TV Channel 15 would satisfy its public safety service needs, including meeting the growing demands on its existing use of TV Channels 14, 16 and 20, achieving its goal of a single-platform, standards-based radio communications network, and providing greater interoperability among the area's public safety agencies.⁹⁶ Because the County selected this solution for its planned system, the County cannot, at the current time, make use of 700 MHz public safety spectrum without altering and delaying implementation of its system significantly. Accordingly, we conclude that the 700 MHz public safety spectrum is not immediately available to satisfy the County's spectrum needs. We fully expect, however, as we are now very near the February 2009 DTV transition date, that any future spectrum planning efforts take into account the availability of all public safety spectrum, including the 700 MHz band. We otherwise accept the representations of APCO and the 800 MHz Regional Planning Committee that no other public safety spectrum is available to meet the County's needs. Accordingly, based on the record before us and our analyses regarding the availability of spectrum in the Los Angeles urbanized area, we concur with the County and find that no other public safety spectrum is immediately available to satisfy the requested public safety service use.

23. *The requested use is technically feasible without causing harmful interference to other spectrum users entitled to protection from such interference under the Commission's regulations.* Our analysis of this criterion is three-fold. We first review the effects of the County's proposed operations on full-power TV and DTV stations. Next, we examine the impact on LPTV and TV translators and whether the County's proposed operations would impact their transitions to digital broadcasting. Finally, we consider the implications of the County's proposed operations on low power auxiliary stations, such as wireless microphones.

24. The County checked the distances between its proposed base stations relative to nearby TV and DTV stations.⁹⁷ All 28 of the County's proposed base stations meet the TV station separation requirements of Sections 90.307 and 90.309,⁹⁸ except for seven base stations with respect to co-channel DTV Station KSBY.⁹⁹ Accordingly, the County requires waiver of Section 90.309. Despite the short

⁹⁶ See Waiver Request at 2-3.

⁹⁷ See TV Study. The TV stations are DTV Station KSBY, San Luis Obispo, California on channel 15, full power TV Station KINC, Las Vegas, Nevada on channel 15, and DTV Station KINC, Las Vegas, Nevada on channel 16.

⁹⁸ 47 C.F.R. §§ 90.307, 90.309.

⁹⁹ See TV Study at 11.

spacing of seven base stations, the County's further analysis shows that zero percent of the population within the Station KSBY protected service area would be affected by the County's base and mobile operations, as described below. Because the County would not cause harmful interference to this station or any other full-power TV and DTV stations, waiver of the spacing requirements is warranted. DTV Station KSBY would still be entitled to full interference protection from the County's operations. No parties commented on the County's TV Study and its findings.

25. We describe the methodology of the TV Study for this further analysis of DTV Station KSBY. The County defined the study area as "enclosed by ... [the] digital service area contour."¹⁰⁰ The study area is divided into cells, each of which is "a square surface area tile with 3-arc second latitude and longitude dimensions."¹⁰¹ The County computed the desired median field strength of the DTV Station KSBY (the "desired" signal strength) at each cell.¹⁰² Next, the County computed and summed the undesired field strengths of its base stations at each cell.¹⁰³ Then, the County calculated the desired-to-undesired ratio of field strengths (D/U ratio) and compared it to the minimum required protection threshold value.¹⁰⁴ For simplicity, the County conducted its base station interference simulations at a single frequency of 477.25 MHz.¹⁰⁵ Next, the County determined "the affected population within ... the cell if the cell fail[ed] to provide an adequate D/U ratio."¹⁰⁶ Finally, the County repeated this process until all cells in the study area had been evaluated, and computed the percentage of the affected population in the study area.¹⁰⁷ Previously, the Commission approved this methodology for the purpose of demonstrating predicted interference from public safety land mobile operations to the reception of TV/DTV stations in the 700 MHz band.¹⁰⁸ The County found that 0.00 percent of the population in the

¹⁰⁰ *Id.* at 13. The County states that "the 90th (or 10th) percentiles of a large number of lognormal or Gaussian random process[es] do not analytically combine within a full tile analysis. Instead, in order to proceed with mathematical rigor, one must compute the average or median levels." *Id.* at 20. Therefore, the DTV service contour levels "were assessed at the analog 64 dBu F(50,50) level, not at the digital 41 dBu F(50,90) level. Because of this, full 50 dB co-channel protection was afforded, as opposed to the 37 dB implied from [47 C.F.R.] § 90.545 *TV/DTV Interference Protection Criteria* (27 dB with additional 10 dB 450-512 MHz Protection)." *Id.* note 5.

¹⁰¹ TV Study at 13.

¹⁰² *See id.* at 14, 20. The County used the Longley-Rice radio propagation model, which makes "predictions of radio field strength at specific geographic points based on the elevation profile of terrain between the transmitter and each specific reception point." *See* OET Bulletin No. 69, Longley-Rice Methodology for Evaluating TV Coverage and Interference," Office of Engineering and Technology, Federal Communications Commission (Feb. 6, 2004) (OET-69) at 1.

¹⁰³ *See* TV Study at 14, 20.

¹⁰⁴ *See id.* at 14, 20. The County used 50 dB protection as the threshold value. *See id.* at 20, note 5.

¹⁰⁵ *Id.* at 18.

¹⁰⁶ *Id.* at 14. The County reports that "[t]he population count for each study area cell is obtained from U.S. Census Bureau Year 2000 census block data." *Id.* at 21.

¹⁰⁷ *See id.* at 14.

¹⁰⁸ *See* State of New York, Request for Waiver of Section 90.545 of the Commission's Rules to Implement a 700 MHz Public Safety System in Specified Counties in the Greater New York City Metropolitan Area, *Order*, 22 FCC Rcd 22195, 22205 ¶ 23 (2007).

DTV Station KSBY study areas would be affected by base station operations.¹⁰⁹ In other words, “there were no D/U ratio violations identified.”¹¹⁰

26. For the mobile interference analysis, the County determined that one base station with associated mobile units is short-spaced to Station KSBY, and none are short-spaced to any Station KINC facility according to Section 90.309, Table C.¹¹¹ The County notes that mobile operational characteristics such as locations, number of simultaneous transmissions, and duration are essentially random.¹¹² The County ran 1,000 random placement trials each of “500, 775, and 1000 simultaneously transmitting radios — all much higher than could be expected to be transmitting (even during a crisis situation).”¹¹³ Again, the County computed a D/U ratio for each cell receiving service and computed the percentage of affected population.¹¹⁴ The County found that 0.00 percent of the population in the DTV Station KSBY study areas would be affected by mobile unit operations in all cases.¹¹⁵ Although the TV Study is based on mobiles at 25 watts ERP and does not take into account that the County seeks mobiles at 50 watts ERP, we believe that a doubling of power, or an additional 3.0 dB of undesired signal, would have little effect on the results, and any resulting interference would be *de minimis*.¹¹⁶ Based upon our review of the methodology and findings presented in the TV Study, and, given that no commenter refuted its findings, we conclude that that requested use is technically feasible without causing harmful interference to full power TV Station KINC and DTV Stations KINC and KSBY. Accordingly, we find that waiver of Section 90.309 is warranted.

27. While the County did not conduct an interference analysis with respect to full power TV Channel 15 Station KPBS, San Diego, California, authorized to SDSU, the County recognizes that any public safety operations on TV Channel 15 prior to February 17, 2009 would be on a secondary, non-interference basis to Station KPBS.¹¹⁷ This station is scheduled to cease analog broadcasting on February 17, 2009 according to the DTV transition mandate. Several of the County’s base stations would be short-spaced to Station KPBS, thus requiring waiver of our interference protection rules.¹¹⁸ As we note above,

¹⁰⁹ See TV Study at 29. The County computed results for DTV Station KSBY’s service areas pertaining to both its digital special temporary authority and its construction permit. See *id.* at 11, 29.

¹¹⁰ TV Study at 29.

¹¹¹ See *id.* at 11-12. The Study indicates that the proposed mobiles operate at a maximum effective radiated power (ERP) of 25 watts. See *id.* at 8. However, the three applications with mobile units indicate 50 watts ERP. See File Nos. 0002981309, 0002981710, and 0002985284. For mobiles at 25 and 50 watts ERP, the associated base station must be separated at least 201 and 217 kilometers, respectively, from protected co-channel TV stations. See 47 C.F.R. § 90.309 Table C. Considering that the County used 201 kilometers as the short-spacing criterion (see TV Study at 37) we found that no additional base stations are short-spaced to any TV station using 217 kilometers.

¹¹² See TV Study at 17.

¹¹³ *Id.* at 18, 19. The County employed Monte Carlo statistical modeling simulations “to conduct a large number of mobile radio-distribution trials to the extent that the interference estimation results achieve a statistically significant representation of the actual interference environment.” *Id.* at 17. Monte Carlo methods are a widely used class of computational algorithms for simulating the behavior of various physical and mathematical systems. Monte Carlo simulation methods are stochastic, *i.e.*, nondeterministic in some manner.

¹¹⁴ See TV Study at 18-19.

¹¹⁵ See *id.* at 27-28.

¹¹⁶ See *supra* note 111.

¹¹⁷ Waiver Request at 4, note 5.

¹¹⁸ See 47 C.F.R. § 90.309 Tables A, C.

the County filed a further supplement indicating that it “now commits that it will not initiate operations on 476-482 MHz until after February 17, 2009, the statutory deadline for the DTV transition.”¹¹⁹ The County states that “[a] waiver is required now so that the County can proceed with more detailed planning, design, and construction of the system in anticipation of the channel being vacated by KPBS-TV.”¹²⁰ We believe this solution is technically feasible, as it would permit Station KPBS to provide analog service on TV Channel 15 without concern of interference from the County until Station KPBS is required by statute to cease analog operations. Accordingly, a grant will be accompanied by conditions that (1) the County’s operation on TV Channel 15 must not commence before February 18, 2009; and (2) notwithstanding the first condition, the County’s operations on TV Channel 15 must not interfere with over-the-air reception of Station KPBS broadcasts on TV Channel 15. Therefore, we conclude that the requested use, as conditioned, is technically feasible without causing harmful interference to full power TV stations. Our conclusion does not reflect a general inclination to grant similar Section 337(c) requests to be licensed for UHF spectrum that is currently unavailable due to the TV interference protection criteria of Sections 90.307 and 90.309.

28. Next we examine whether the County’s operation would impede the ability of LPTV and TV translators to transition to digital operations. The County states that it “has not studied in detail the impact of its proposed operation on low power television (LPTV) or TV translator stations operating on channel 15 in Southern California”¹²¹ because “[s]uch stations are secondary under the FCC’s rules, and would be required to accept interference from the County, and to cease operations interfering with the County’s public safety system.”¹²² Under the Commission’s rules, an LPTV or TV translator application will not be accepted if it specifies a site that is within a 130-kilometer circle around given coordinates for Los Angeles, California on TV Channels 14, 16, and 20 and all first adjacent channels, including TV Channel 15.¹²³ Given that an effective protected contour has existed for TV Channel 15, we find that permitting the County to operate on TV Channel 15 would not substantially change LPTV and TV translator requirements to protect Los Angeles area land mobile operations, particularly in terms of where low power stations can be located.¹²⁴ Because the land mobile protection requirements also extend to digital LPTV and TV translators,¹²⁵ we conclude that the County’s operation would not impede the ability of LPTV and TV translators to transition to digital operations. Accordingly, we find that the County’s operations on TV Channel 15 require the same interference protection from LPTV and TV translators as if there were a land mobile allocation on TV Channel 15 in the Los Angeles urbanized area.

¹¹⁹ Further Supplement at 1.

¹²⁰ Waiver Request at 4.

¹²¹ *Id.* at 7.

¹²² *Id.*; LA County Reply Comments at 4, citing *Digital LPTV R&O*, 19 FCC Rcd at 19372 (2004).

¹²³ See 47 C.F.R. § 74.709(a), (c). Currently, our rules provide for areas around given coordinates in San Diego, California where LPTV and TV translators are not required to protect the Los Angeles 130-kilometer land mobile contour. See 47 C.F.R. § 74.709(b). We anticipate the Commission removing this exclusion from the rules after San Diego’s TV Channel 15 analog service terminates.

¹²⁴ The authorization of TV Channel 15 for public safety use in Los Angeles will require LPTV, TV translator and Class A TV applicants to limit the predicted field strength of proposed facilities to 52 dBu at the protected 130-kilometer co-channel contour. Currently, low power TV applicants must limit their predicted field strength at this contour to the less restrictive 76 dBu to protect land mobile service on adjacent channels 14 and 16. In this regard, the grant of the waiver request to Los Angeles County would further restrict the use of channel 15 for digital low power TV operations at locations near the 130-km protected land mobile contour.

¹²⁵ See 47 C.F.R. § 74.789.

29. We have examined Entravision's application for digital LPTV on TV Channel 14 and SDSU's application for a digital TV translator on TV Channel 15.¹²⁶ As noted above, the Commission dismissed both applications on May 15, 2008, and both applicants filed timely petitions for reconsideration of their respective dismissal letters.¹²⁷ In any event, because both stations would be situated outside the Los Angeles 130-kilometer land mobile protected contour, we find that the County's proposed operations would not impede SDSU's ability to transition to digital TV translator operations on TV Channel 15 and Entravision's ability to transition to digital LPTV on TV Channel 14. We also find that no Class A TV stations would be adversely impacted by the County's proposed operations.¹²⁸ Therefore, we conclude that that requested use is technically feasible with respect to LPTV, TV translators, and Class A TV stations.

30. Concerning SDSU's contention that the County should protect pending broadcast applications, we note that *Goosetown* required a showing of interference protection to all categories of TV operations, both existing stations and pending applications, because "applicants seeking a waiver of Section 90.305 whose area of operation extends outside the 80-mile area [of an urbanized area where land mobile operations are primary on a particular TV channel] could negatively impact the availability of DTV spectrum for television stations."¹²⁹ The County states, "Channel 15 is not currently assigned for television service in the immediate Los Angeles area, primarily due to the existing adjacent-channel public safety and other land mobile allocations that a television station on channel 15 would be required to protect from interference."¹³⁰ DTV stations could not use TV Channel 15 in the Los Angeles area, so permitting the County's land mobile use of TV Channel 15 would not deplete the pool of DTV spectrum. We already conclude above that the County's operation would not impede the ability of LPTV and TV translators to transition to digital operations. Based on our conclusions above, we find that the proposed operations would not affect the availability of DTV spectrum. For the foregoing reasons, we determine that *Goosetown* is inapposite to the current situation.

31. Finally, we address concerns regarding impact on wireless microphones and other low power auxiliary stations. Section 74.803(b) states that low power auxiliary station usage is secondary to TV broadcasting and land mobile stations operating in the UHF-TV spectrum and must not cause harmful interference.¹³¹ While we appreciate the concerns of the wireless microphone proponents, we note that these devices are not entitled to protection under our rules. Moreover, given that Part 74 low power auxiliary devices may operate in various, different bands, we find the likelihood that such devices would experience interference from the proposed operation is relatively minimal from a location, time, and spectrum standpoint. Based on the above, we conclude that the requested use is technically feasible without causing harmful interference to other spectrum users entitled to protection from such interference under the Commission's regulations.

32. *The use of the unassigned frequencies for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the*

¹²⁶ See applications BDCCDTL-20070411AAR and BDCCDTT-20070417AAM, respectively.

¹²⁷ See *supra* note 36.

¹²⁸ Class A TV stations consist of certain former LPTV stations that have met certain operating requirements and have been accorded primary status. See 47 C.F.R. §§ 73.6001, 73.6002.

¹²⁹ *Goosetown*, 6 FCC Rcd at 12797 ¶ 13.

¹³⁰ Waiver Request at 3.

¹³¹ 47 C.F.R. § 74.803(b).

application is made. The County states that the adjacent “channels 14 and 16 ... are currently allocated for land mobile communications in Los Angeles and currently provide the principal radio communications for the County and other public safety agencies within its borders.”¹³² Given that the immediately adjacent TV Channels 14 and 16 as well as TV Channel 20 already are in use by the County for the provision of public safety services, we find that public safety use of the TV Channel 15 in Los Angeles County is consistent with public safety spectrum allocations in the geographic area.

33. *The unassigned frequencies have been allocated for its present use not less than two years.* The County states that TV Channel 15 “has been allocated for television broadcasting for decades prior to the submission of the Request for Waiver.”¹³³ We note that the 470-512 MHz portion of the TV broadcasting band was allocated for shared use with land mobile systems in 1970.¹³⁴ We also note that DTV was allocated in the TV broadcast band in 1997.¹³⁵ Accordingly, we are not persuaded by Entravision’s argument that “Congress intended that the Commission allow new parties, such as Entravision, to have use of a frequency assignment before the public safety sector could seek it out.”¹³⁶ Because these frequencies have been allocated for their present use for more than two years, we conclude that this prong of our analysis is satisfied.

34. *Granting the applications is consistent with the public interest.* The County asserts that “[r]ather than leaving channel 15 fallow in Los Angeles, it should be made available for public safety, the highest and best use of the spectrum.”¹³⁷ The County states that a grant “would allow for desperately needed expansion of public safety communications in the Los Angeles area in a manner that would promote efficient interoperability among the plethora of public safety agencies serving the region.”¹³⁸ We recognize the public interest in reducing the potential for interference to the public’s reception of existing TV broadcasts and to broadcast auxiliary operations. We also recognize the public interest of not impeding the obligations of all broadcasters to transition to digital operations. At the same time, we also must consider the Commission’s statutory purpose “of promoting safety of life and property.”¹³⁹ In view of the record, we find persuasive those comments stating that a consolidated UHF system in Los Angeles County would provide a valuable communications resource for the County and local public safety agencies to handle everyday operations, homeland security prevention, protection and response, and to handle natural and man-made disasters effectively, efficiently and with the least amount of lives lost and property damaged.¹⁴⁰ Thus, to the extent TV Channel 15 would provide the County and its local public

¹³² Waiver Request at 3.

¹³³ Waiver Supplement at 6.

¹³⁴ See Amendment Of Parts 2, 89, 91 and 93; Geographic Reallocation Of UHF-TV Channels 14 Through 20 to the Land Mobile Radio Services for Use Within the 25 Largest Urbanized Areas of the United States; Petition Filed by the Telecommunications Committee of the National Association of Manufacturers To Permit Use of TV Channels 14 and 15 by Land Mobile Stations in the Los Angeles Area, Docket No. 18261, *First Report and Order*, 23 FCC 2d 325 (1970).

¹³⁵ See Advanced Television Systems and Their Impact upon the Existing Television Service, *Sixth Report and Order*, MM Docket No. 87-268, 12 FCC Rcd 14588 (1997).

¹³⁶ Entravision Reply Comments at 3.

¹³⁷ Waiver Request at 10.

¹³⁸ *Id.*

¹³⁹ See 47 U.S.C. § 151.

¹⁴⁰ See *supra* para. 9.

safety agencies with the needed channel capacity and allow for the rapid implementation and deployment of a county-wide interoperable radio network,¹⁴¹ we find that grant of the Waiver Request, subject to conditions specified herein, is consistent with the public interest and the Commission's goal "of promoting safety of life and property." Because we find that the Waiver Request demonstrates that access to TV Channel 15 spectrum is necessary to address the deficiencies described by the County,¹⁴² we conclude that waiver of Sections 90.303, 90.305, 90.309, and Part 73 of our rules to enable the County to use all frequencies in the TV Channel 15 band for public safety communications, as conditioned herein, is consistent with the public interest.

35. As discussed above concerning the availability of the 700 MHz public safety narrowband spectrum, we note that our conclusion is based on unique circumstances associated with the instant Waiver Request: the Los Angeles public safety community relies on this band to a far greater extent than that almost any other region; Los Angeles requests these channels as the core of an extensive regional system; and Los Angeles commenced its system design and filed its applications reasonably long before the digital transition date approached. Furthermore, in this case, the single platform solution is a reasonable "requested public safety use" and granting a waiver to satisfy this request is in the public interest since at the time the County planned its system, the 700 MHz spectrum was not available. Given that the 700 MHz spectrum is immediately available at this point, however, we would expect that any future planning would take this into account, and that if there were solutions using 700 MHz spectrum that could meet public safety's needs, then we would not find it in the public interest to grant a waiver for a solution that required the use of non-public safety spectrum. As a general matter, it is anticipated that future applicants for non-public safety spectrum in the UHF T-band will be subject to a more comprehensive application process as the Commission's assessment of spectrum use in this band evolves.

36. *Miscellaneous matters.* South Bay Regional Public Communications Authority (South Bay) requests further consideration of the County's statement that the system would "provide seamless coverage for all public safety agencies throughout the county,"¹⁴³ because the *Public Notice* "appears to indicate that if granted, the waiver would make the County of Los Angeles the sole licensee of this valuable spectrum."¹⁴⁴ South Bay argues that the County's statement "fails to address the requirements of Municipal government agencies within Los Angeles County, and non-public safety first responders including public works, utilities, transit, and other critical infrastructure agencies."¹⁴⁵ In addition, South Bay requests the establishment of "a reserve of channels that can be equitably assigned to Municipal agencies within the County."¹⁴⁶ We are not persuaded by South Bay's first assertion, because we find that the County sufficiently addresses the requirements of municipal government entities to the extent that it anticipates that its system will be used by all public safety agencies in the county.¹⁴⁷ Moreover, with respect to South Bay's assertion that the County must address the needs of "non-public safety first

¹⁴¹ *Id.*

¹⁴² See Waiver Request at 1-2.

¹⁴³ South Bay Comments at 2 (emphasis added by South Bay).

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ See Waiver Request at 2. The County states that "a total of 50 law enforcement agencies and fire departments within the County operate their primary public safety communications in the UHF band, primarily in 470-512 MHz." *Id.* at 5. The County also provides a list of police agencies and fire departments and their associated frequency bands. See *id.*, Attachment 1.

responders including public works, utilities, transit, and other critical infrastructure agencies,”¹⁴⁸ any users must meet the statutory definition of “public safety services” in order to be eligible to operate on frequencies granted pursuant to this Order. We also find South Bay’s request to establish a reserve of channels to be assigned to Municipal agencies within the County to be beyond the scope of this proceeding, unsubstantiated by the record, and unnecessary in light of the County’s proposed operations.

IV. CONCLUSION

37. Based on the record before us, we conclude that the County has demonstrated the criteria set forth under Section 337(c) of the Act, and that grant of its request for waiver of certain Commission rules to enable it to use frequencies in the 476-482 MHz band for public safety communications is warranted. We therefore grant the request for waiver,¹⁴⁹ subject to the following conditions:

- (1) The County’s operations on TV Channel 15 must not commence before February 18, 2009;
- and (2) notwithstanding the first condition, the County’s operations on TV Channel 15 must not interfere with over-the-air reception of Station KPBS broadcasts on TV Channel 15.

V. ORDERING CLAUSES

38. Accordingly, IT IS ORDERED that, pursuant to Sections 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 337(c), the request for waiver associated with the captioned applications filed by the County of Los Angeles, California, on April 5, 2007, as amended, IS GRANTED as conditioned herein, and above-captioned file numbers SHALL BE PROCESSED consistent with this *Order* and the Commission’s rules.

39. This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission’s rules, 47 C.F.R. §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

Derek K. Poarch
Chief
Public Safety and Homeland Security Bureau

¹⁴⁸ South Bay Comments at 2.

¹⁴⁹ In view of our conclusion that a waiver is warranted under Section 337(c) of the Act, we need not address whether the County’s waiver request should be granted under Section 1.925(b)(3) of the rules.

APPENDIX A**LIST OF COMMENTERS****Comments**

Azusa, California Police Department (Azusa PD)
Claremont, California Police Department (Claremont PD)
Downey, California Police Department (Downey PD)
El Monte, California Police Department (El Monte PD)
Enterprise Wireless Alliance (EWA)
Entravision Holdings, LLC (Entravision)
Glendale, California Police Department (Glendale PD)
Los Angeles City Councilmember and Chair of the Public Safety Committee Jack Weiss (Jack Weiss)
Los Angeles Area Fire Chiefs Association (LAAFCFA)
KJLA, LLC (KJLA)
Los Angeles Mayor Antonio Villaraigosa (Mayor Villaraigosa)
Motorola, Inc. (Motorola)
National Public Safety Telecommunications Council (NPSTC)
Raytheon Company (Raytheon)
San Diego State University (SDSU)
Shannon M. Heath, Hermosa Beach, California
Shure, Inc. (Shure)
South Bay Regional Public Communications Authority (South Bay)
Vernon, California Police Department (Vernon PD)

Reply Comments

Broadway League
Metropolitan Water District of Southern California
Entravision Holdings, LLC
County of Los Angeles

Other Letters

Los Angeles Police Department (LAPD)